

REGULATIONS
for holding a competition in programming various tasks within the framework
of Stage I of the II Open International Olympiad in Informatics

REQUIREMENTS
for the programs being developed

1. The program developed to solve tasks at this stage must be implemented in a programming language specified in the list of programming languages that can be used at the Olympiad.
2. The programs being developed must run in the Windows operating system.
3. A separate program must be developed for each task. The program must be executed as executable machine code (*.exe).
4. The program must be executed in console mode or in resident form; in extreme cases, it must not be burdened with a heavy interface and be executed in one window; after launch, it must automatically complete the task and end immediately.
5. Each program must read data in the specified format from the input.txt file located next to it in the same directory and, after completing the task, must create an output.txt file next to it and place the answer in it in the specified format.
6. The program execution time should not exceed 1 second.
7. In the event that the judging program cannot read the response of the participant's program due to failure to comply with the specified requirements, the participant's program cannot be restarted and this fact cannot be appealed.
8. After completing the tasks, the participant needs to create a folder, give it a name in the form of his participant code (issued upon registration before the start of the competition and consists of 1 capital letter and two numbers), and create two more folders in it, give the first folder the name "1" and place the source program codes (sources) in it, and name the second folder in the form of your participant code (similar to the root folder) and place the machine codes of the created programs (executable files) in it. In the second folder, each program must begin with test* and before the .exe extension must end with the task number, i.e. the program for the first task should be called test1.exe, for the second task - test2.exe, etc. If a program was not created for a task, then the numbering takes into account the uncreated program. For example, a participant with code P34 completed tasks 1, 3 and 5, then his folder structure should look like this:

| P34 | |
|--|--|
| 1: source1 source3 source5 | P34: test1.exe test3.exe test5.exe |

9. If other applications and files are needed to run the program, they should be placed in the same directory as the program itself.
10. After preparing the said catalogs, the participant must transfer them to the jury member via a network or data carrier.

11. Participants are required to transfer the source codes of all programs to the jury team; the jury may remove from the competition programs whose source codes were not transferred to it.

PROCEDURE for conducting and summing up the competition

1. There are a total of 5 tasks given in this stage. These problems will be randomly selected from a list of problems received from foreign universities and developed by independent experts in the country.
2. Each participant must be placed at a separate personal computer and registered by issuing a code consisting of one capital letter and two numbers (for example, P34).
3. Before the start of the competition, each participant will receive tasks and requirements in electronic form (via the network from an accessible folder) or in another way, or in printed form.
4. The competition will be held on two floors of the university library and in 13 computer classrooms of the Faculty of Digital Technologies and Cyber Security. Each computer lab will have a video surveillance system installed and a jury member will be present.
5. During the first 30 minutes, an Olympiad participant can contact the team leader or representatives of the organizing committee and jury about a problem that he does not understand.
6. During the Olympiad, the participant is allowed to bring a pen, pencil and blank paper. During the Olympiad, it is not allowed to use the Internet, use a telephone, personal laptop or other mobile devices, or consult with other participants.
7. In case of failures in the operating system or in the editor of the programming language used to complete the task on the assigned personal computer, you should not act independently, but contact a representative of the Organizing Committee or members of the jury.
8. If personal needs arise (toilet, water, food, etc.) during the Olympiad, the participant can contact a representative of the organizing committee.
9. A student who violates these requirements will be excluded from the list of participants in this stage of the Olympiad and will be assigned 0 points for this stage.
10. 180 minutes are given to complete the tasks. Participants can complete and submit their assignments in advance. The time spent on completing their tasks is recorded by the jury members in minutes. This time will be added to the time spent in other stages and will be taken into account for equality of points.
11. A list will be compiled in the form of an Excel book, in which the participant's code and the time in minutes spent by him on completing tasks at this stage will be entered, then this list will be entered into the main judging program.
12. Programs submitted by participants for evaluation will be transmitted in folders with the name in the form of a participant code via the network or electronic media to jury members or assistants. All participants' folders will be collected in one directory and analyzed by the judging program. The judging program will sequentially launch one by one the programs of each participant, will wait for the answer of each program and, having waited, will compare them with the

correct answer, and if the answer is correct, 2 points will be awarded. One program will be launched 5 times. Thus, if a participant completed all five tasks, each of his five programs would be run 5 times, resulting in a total of 25 tests. After launching all programs for a particular participant, the judging program will calculate the total number of points collected by the participant, enter them into the database and save the results in a *.log file with a name that matches the participant's code.

13. After checking the work of all participants, the judging program will automatically sort the participants according to the number of points they collected based on the results of 2 stages, then according to the time spent and in accordance with the number of 1st places (20), 2nd places (40) and 3rd places (60) it will independently determine winners and prize-winners of the Olympiad.